

REMARKS

The drawings are objected to under 37 CFR 1.83. Applicants are confused as to the position the Examiner has taken on this issue. FIGs. 2A-2B and 3A-3B illustrate a MOSFET and that is clearly described throughout the specification. Furthermore, FIGs. 2B and 3B illustrate the construction of a pMOS (p-type MOSFET) device. As described, the elements of FIG. 2B and 3B can also be used to form a NMOS (n-type MOSFET) device. Applicants are willing to amend the figures to satisfy the Examiner's concerns, however, as it stands all elements regarding MOSFET, nMOS, and pMOS devices are supported.

Claims 43, 57, and 69 are objected to because of several informalities. Applicants have amended the claims to address the Examiner's concerns.

Claims 43-55 and 69-81 are rejected under 35 USC §102(b) as being clearly anticipated by Chu et al., U.S. 5,906,951.

Independent claim 43 recites a MOSFET device. The MOSFET device includes a substrate. A relaxed SiGe layer is formed on the substrate. The relaxed SiGe layer has a Ge content between 0.51 and 0.80. A ϵ -Si layer is deposited on the relaxed SiGe layer.

Independent claim 69 recites a MOSFET device. The MOSFET device includes a substrate. A relaxed SiGe layer is formed on the substrate. The relaxed SiGe layer has a Ge content between 0.51 and 0.80. A ϵ -Si layer is deposited on the relaxed SiGe layer so that hole mobility enhancement increases with effective vertical field.

Chu et al. '951 describes a SOI substrate and method for forming strained layers of Si and/or SiGe on a first substrate. A layer of Si and/or SiO₂ is formed over the strained layers. A

second substrate is bonded having an insulating layer on its upper surface to the top surface above the strained layers, and removing the first substrate.

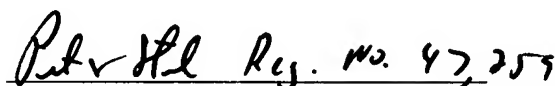
In contrast, the invention as claimed includes a relaxed SiGe layer having a Ge content between 0.51 and 0.80, whereas in Chu et al. '951, the relaxed SiGe layer has a Ge content between 0.20 and 0.50. Moreover, Chu et al. '951 utilizes a strained $\text{Si}_{1-z}\text{Ge}_z$ layer with a Ge content between 0.51 and 0.80, however, this is not equivalent to using a relaxed SiGe layer with a Ge content between 0.51 and 0.80. Therefore, Chu et al. '951 does not anticipate claims 43 and 69.

As to claims 44-55 and 70-81, they are dependent on claims 43 and 69, respectively. Therefore, claims 44-55 and 70-81 are also allowable for the same reasons argued with respect to claims 43 and 69.

In view of the above amendments and for all the reasons set forth above, the Examiner is respectfully requested to reconsider and withdraw the objections and rejections made under 35 U.S.C. §§ 103 and 112, first and second paragraphs. Accordingly, an early indication of allowability is earnestly solicited.

If the Examiner has any questions regarding matters pending in this application, please
feel free to contact the undersigned below.

Respectfully submitted,

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